

# LANGUAGE OF ANIMALS

"They Have Learned Through Experience That Silence Promotes Peace and Long Life"

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IN the jungle and the wilderness one hears really little of vocal wild-animal language. Through countless generations the noisiest animals have been sought out and killed by their enemies, and only the more silent species have survived. Yet all the higher animals, as we call the higher vertebrates, have the ability to exchange thoughts and convey ideas—and that is language.

At the threshold of this subject we are met by two interesting facts. Excepting the song-birds, the wild creatures of to-day have learned through instinct and accumulated experience that silence promotes peace and long life. The bull moose which bawls through a mile of forest, and the bull elk which bugles not wisely but too well, soon find their heads hanging in some Eastern dining-room, while the silent Virginia deer, like the brook, goes on forever.

Association with man through countless generations has taught domestic animals not only the fact of their immunity in speech, but also that often there is great virtue in a vigorous cry. With a peculiar staccato neigh, the hungry horse jars the dull brain of its laggard master, and prompts him to "feed and water the stock." But how different is the cry of a lost horse, which calls for rescue from afar. It cannot be imitated in printed words; but every plainsman knows the shrill and prolonged trumpet-call of distress that can be heard a mile, understandingly.

And think of the vocabulary of the chicken! Years of life in nominal security have developed a creditable vocabulary of calls and language cries. The most important, and the best known, are the following:

"Beware the hawk!" — "Coor! Coor!"  
 "Murder! Help!" — "Kee-awk! Kee-awk! Kee-awk!"  
 "Come on!" — "Cluck! Cluck! Cluck!"  
 "Food here! Food!" — "Cook-cook-cook-cook!"  
 Announcement — "Cut-cut-cut-dah-cut!"

But does the wild jungle-fowl, the ancestor of our domestic chicken, indulge in all those noisy expressions of thought and feeling? By no means. I have lived for months in jungles where my hut was surrounded by jungle-fowl, and shot many of them for my table; but the only vocal sound I ever heard from their small throats was the absurdly shrill bantam-like crow of the cock. And even that led to several fatalities in the ranks of *Gallus stanleyi*.

Domestic cattle, swine and fowls have each a language of their own, and as far as they go they are almost as clear-cut and understandable as the talk of human beings. Just how much more is behind the veil that limits our understanding we cannot say; but no doubt there is a great deal.

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But it is with the language of wild animals that we are most concerned. As already pointed out, wild creatures other than song-birds do not care to say much, because of the danger of attracting enemies that will exterminate them. Herein lies the extreme difficulty of ascertaining how wild beasts communicate. In the Annamalai Hills of Southern India I hunted constantly for many weeks through forests actually teeming with big game. There were herds upon herds of elephants, bison and axis deer, many Sambar deer, monkeys by the hundred, and a good sprinkling of bear, wild boar and tiger.

We saw hundreds upon hundreds of animals; but with the exception of the big black monkeys that used to swear at us, I can almost count upon my

eight fingers the whole number of times that I heard animals raise their voices to communicate with each other. You can chase bison, elephants and deer all day without hearing a single vocal utterance. They know through their long experience the value of silence.

The night after I shot my second elephant was an exception. The herd had been divided by our onslaught. Part of it had gone north, part of it south, and our camp for the night (beside the dead tusker) lay directly between the two. About bedtime the elephants began signaling to each other by trumpeting, and what they sounded was "The Assembly." They called and answered repeatedly; and finally it became clear to my native followers that the two herds were advancing to unite, and were likely to meet in our vicinity. That particular trumpet-call was different from any other that I ever have heard. It was a regular "Hello" signal-call, entirely different from the "Tal-loo-e" blast which once came from a feeding herd and guided me to it.

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But it is only on rare occasions that elephants communicate with each other by sound. I once knew a general alarm to be communicated throughout a large herd by silent signals, and a retreat organized and carried out in absolute silence. The herd contained about thirty elephants, and they were scattered over quite an area of brushy hilltop, feeding; but they maneuvered so well that in getting together and making off they made no sound that could be heard even fifty feet away. Their danger-signals to each other must have been made with their trunks and their ears; but we saw none of them, because all the animals were concealed from my view except when the two scouts of the herd were hunting for us.

In captivity, an elephant trumpets in protest, or through fear or through rage; but I am obliged to confess that as yet I cannot positively distinguish one from the other.

It is natural that we should look closely to the apes and monkeys for language, both by voice and sign. In 1891 there was a flood of talk on "the speech of monkeys," and it was not until about 1904 that the torrent stopped. At first the knowledge that monkeys can and do communicate (to a limited extent) by vocal sounds was hailed as a "discovery"; but unfortunately for science nothing has been proved beyond the long-known fact that primates of a given species understand the meaning of the few sounds and cries to which their kind give utterance.

Thus far I never have succeeded in teaching a chimpanzee or orang-utan to say even as much as "Oh" or "Ah." Nothing seems to be farther from the mind of an orang than the idea of vocal utterance as a useful medium. His "speech" consists of three things. In coaxing he utters a nasal whine, and when in a rage he either screams or roars. That is absolutely all.

The chimpanzee does a little more; but at the best its vocal accomplishments are few and seldom displayed. For two years I have been trying to provoke a vigorous specimen in the Zoological Park to laughter by vocal sound. Soko, a black-faced chimpanzee, is active and good-natured, and also "ticklish under the arms." She is fond of a lark, and loves to be played with. Fifty times at least I have tickled her on her sides, to provoke genuine laughter;

but while she laughs under her breath and all over her face until she gasps for breath, she never yet has rewarded my efforts with even one vocal syllable.

Our Polly is the most affectionate and demonstrative chimpanzee that I have ever seen, and she has the greatest vocal powers. She knows me well, and when I greet her in her own language she usually answers me immediately and vociferously.

Often when she has been busy with her physical-culture exercises and Delsartean movements on the horizontal bars or trapeze in the top of her big cage, I have tested her by quietly joining the crowd of visitors in the center of the room before her cage, and saying to her: "Polly! Wah! Wah! Wah!"

Nearly every time she stops short, gives instant attention and joyously responds "Wah! Wah! Wah!" repeating the cry a dozen times while she clammers down to the lower front bars to reach me with her hands. When particularly excited she cries "Who-oo! Who-oo! Who-oo!" with great clearness and vehemence, the two syllables pitched just four tones apart. This cry is uttered as a joyous greeting, and also at feeding-time, in expectation of food; but, simple as the task seems to be, I really do not know how to translate its meaning into English. In one case it appears to mean "How do you do?" and in the other it seems to stand for "Hurry up!"

Polly screams when angry or grieved, just like a naughty child; and her face assumes the extreme of screaming-child expression. She whines also when coaxing, or when only slightly grieved. With these four manifestations her vocal powers stop short. Many times I have opened her mouth widely with my fingers, and tried to surprise her into saying "Ah," but with no result. It seems impossible to stamp the vocal-sound idea upon the mind of an orang-utan or chimpanzee. Polly utters two distinct and clearly cut syllables, and it seems reasonably certain that her vocal organs could do more if called upon.

The cries of the monkeys, baboons and lemurs are practically nothing more than squeaks, shrieks or roars. The baboons (several species, at least) bark or roar most explosively, using the syllable "Wah!" It is only by the most liberal interpretation of terms that such cries can be called language. The majority express only two emotions—dissatisfaction and expectation. Every primate calls for help in the same way that human beings do, by shrill screaming; but none of them ever cries "Oh" or "Ah."

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The only members of the monkey tribe that ever spoke to me in their native forests were the big black langurs of the Annamalai Hills in Southern India. They used to glare down at us, and curse us horribly every day. Had we been big pythons instead of men they could not have said "Confound you!" any more plainly or more vehemently than they did.

It is true that in those museum-making days our motto was "All's fish that cometh to net"; and we killed monkeys for their skins and skeletons the same as other animals. My black-skinned Mulcher hunters said that the bandarlog hated me because of my white skin; but I fancied that was pure fancy. At all events, as we stalked silently through those forests, half a dozen times a day we would hear an awful explosion overhead, startling to men who were still-hunting big game, and from the middle branch of the tree-tops angry and snarling black faces would